

Remarks

Claims 1-20 are pending in the present application. Claims 1, 3, 8 and 20 have been amended herein. Reconsideration is requested.

The Examiner objected to Claim 3, because as presented it appeared to depend from itself, and suggested a correction to cause it to correctly depend from Claim 2. Applicants thank the Examiner. Claim 3 is amended herein in light of the Examiner's remarks. Withdrawal of the objection is therefore requested.

Claims 1 and 8-20 were rejected under 35 U.S.C. §103(a) as being obvious over Schrems '873 in view of the article to Klaus et al. This rejection is hereby respectfully traversed.

The Examiner remarked that Schrems et al provided the elements of Claim 1, except for the method where the ceramic is deposited by a low temperature ALD method, and cited Klaus et al, concluding that the combination obviated claims 1, and 8-20.

Claim 1 is amended herein and recites in part:

forming relief structures which are trench structures formed within a top side of the substrate, wherein internal areas are arranged essentially perpendicular to the top side of the substrate;

filling the relief structures with a resist in physical contact with the trench in the substrate and subsequently isotropically etching the resist to remove the resist to a relief depth, wherein a resist layer is obtained;

Applicants' respectfully submit that the steps of Claim 1, and in particular the steps recited above, are not shown taught or suggested by the Schrems patent or the combination relied upon by the Examiner.

Schrems '873 teaches a high temperature process which includes, *inter alia*, depositing a first layer (177) and a second layer (178) on the trench wall, and filling the trench with a sacrificial material which is preferably polysilicon. (Abstract, and Col. 15 lines 32-26). Further, various steps taught by Schrems make the use of a resist as claimed for the sacrificial layer unworkable in the Schrems process, for example, the collar oxide

layer deposition at Col. 17 lines 53-60 requires temperatures in excess of 1000 degrees C. The reference states at Col. 4, lines 55-60, that the polysilicon layer used, whatever material, should have temperature stability up to 1100 degrees C.

In order for the references combined to meet the requirements for the rejection obviousness rejection under §103, there must be a likelihood of success. The use of resist as the sacrificial layer, even though this possibility is mentioned in passing in Schrems '873 at Col. 18 lines 16-24, has no possibility of success if used as proscribed by Schrems due to the high temperatures required by Schrems.

Further, the method of the applicants claimed invention advantageously provides a process providing a resist in physical contact with the substrate trench. Schrems '873 teaches away from the claimed method and in fact teaches a first and second liner material in the trench. Klaus et al also does not provide these recited steps, and so Applicants' conclude the method of Claim 1 is unobvious and allowable over the rejection. Reconsideration and allowance are requested.

Claims 8-15 depend from and recite additional steps on the method of Claim 1, and incorporate the steps of Claim 1. Accordingly, these dependent claims are also believed to be allowable. Reconsideration is requested.

Claim 16 is amended herein and recites steps similar to those recited above with respect to Claim 1. For the reasons given above, Applicants respectfully submit that the method of Claim 16 is also allowable over the combination relied upon, Schrems in view of Klaus et al. Accordingly reconsideration and allowance are requested.

Claims 17-19 depend from and recite additional steps on the method of Claim 16, and incorporate the steps of Claim 16. Accordingly, these dependent claims are also believed to be allowable. Reconsideration is requested.

Claim 20 also is a method claim amended herein to recite steps similar to those recited in Claim 1, and Claim 20 is also believed to be allowable for the reasons given above with respect to Claim 1. Accordingly, reconsideration and allowance are requested for Claim 20.

Claims 2-7 were rejected over additional combinations of references with Schrems '873. This rejection is also hereby respectfully traversed.

Applicants submit that as these claims depend from Claim 1, and as the steps of Claim 1 are now allowable over the Schrems '873 patent and the various combinations, these dependent claims are also allowable as they incorporate these allowable steps. Accordingly, reconsideration and allowance are also requested for these dependent claims.

The amendment and remarks herein are believed to be fully responsive to the Examiner's Office Action and to place the application in a condition for allowance.

Applicants respectfully request that the present application be passed to issuance. Please contact Applicant's attorney with any questions regarding this matter.

No fee is believed to be due, however, should there be one please charge fees to deposit account number 50-1065 of the undersigned.

Respectfully submitted,



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